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ABSTRACT

The selection of place names (toponyms) for use on a map depends on the available space. This selection may be distorted by regulations, cartographic procedures, preferences, or map functions. An investigation of place names used on maps of minority language group areas in Western Europe revealed the influence of cartographers and topographers on the kind and number of names to be included. After incorporation on the base map, a number of cartographic processes occur that lead to an overrepresentation of minority language toponyms on derived maps in minority language areas. On smaller scale maps, a generalization process occurs in which only features likely to have majority language names tend to be retained. In addition, specific name categories tend to be overemphasized on derived maps such as small scale topographic maps or road maps. These toponym selection processes lead to a certain bias that, in turn, interferes with national or international comparisons of toponyms based on topographic maps. This does not suggest discontinuing the use of maps for investigating place names, but underlines the importance of selecting the appropriate map and learning the regulations governing the incorporation of names on the base map and the selection process for names on derived maps.
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MAPS AS SOURCES FOR TOPONYMS : CARTOGRAPHIC BIAS

Farjan Ormeling

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Maps as Sources for Toponyms:
Cartographic Bias

Ferjan Ormeling

Professor Ferjan Ormeling teaches cartography in the Department of Geography, State University of Utrecht, the Netherlands. He has recently completed a study on the rendering of linguistic minority toponyms in Western Europe which expands on some of the themes raised in this paper.

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Maps as sources for toponyms - cartographic bias

Summary

In his investigation of the cartographic representation of Western European minority toponyms the author had to take into account the influence of both topographers and cartographers on the kind and number of toponyms to be incorporated in topographic maps. After incorporation on the base map (as a result of codification) a number of cartographic processes occur that lead to an overrepresentation of majority language toponyms on derived maps in minority language areas. These processes are described here. In the generalization process only the more important features tend to be retained at smaller scales, that is those features most apt to be provided with exonyms in the present majority language. Next to generalization specific name categories tend to be overemphasized on derived maps, such as small scale topographic maps or road maps. Generalization and the selection of toponym categories lead to a certain bias which, in turn, interferes with national or international comparisons of toponyms based on topographic maps.

1. Introduction

Cartographers give one one's image of the world. But apart from providing this global image, maps also serve as information systems or inventories for a number of sciences. For those interested in the geolinguistics of toponymy it will be relevant to gain some insight into the proced followed by topographers and cartographers in collecting toponyms and representing them - as in many cases the topynoms studied will be derived from maps.

The examples used in this paper refer to minority language areas in Western Europe. Linguistic minorities can be defined as groups within a state that do not have the same native language as does the dominant group; the term

minority toponym refers to toponym used (in areas occupied) by linguistic minorities.

The recognition of its language makes an important contribution to the strengthening of the identity of linguistic minorities. The official use of toponyms in the minority language is part of this recognition. The recognition of toponyms on maps seems to be an insignificant aspect thereof. These names, however, are often the first and only manifestation by which the minority can reveal itself to outsiders; a biased representation of their toponyms will be felt especially by them, as it might lead to an image of the region which does not contain any vestige of the minority group in question.

2. Survey and codification

Cartographers have implanted in the minds of all of us pictures of the world fashioned around with their conventions and with names. These names have to be collected, and it falls to topographers to collect them. The procedures for collecting names have been formalized for two centuries now in most of Western Europe. They consist of directives, requiring the production of name forms, name models, of an organization for checking their orthography, and of regulations stating the kind and number of names to be incorporated on maps on various scales.

Name forms have been in use from 1750 onwards, when Cassini obliged the topographers in his service for the production of the map of France 1:86.400, to keep name-files on which, per parish, the names were grouped according to mapped features (Berthaut 1898). These files, "Etats de villes, bourgs et objects dependants des paroisses" had to be checked by the local gentry or clergy for their orthography.

In Britain, proof sheets of new maps based on both civil and military surveys were sent to the local gentry for approval in the 18th century as well. It was not until the 1820's however, that topographers had to ratify the correct spelling of the names by referring to the sources on which these were based. From 1835 onwards the Board of Ordnance used forms with special columns reserved for stating sources. These forms were bundled together to form name-books and from 1839 onwards these forms were printed (Harley and Walters 1982). At that time name-models were prepared for the engraver for accurately positioning the names (Harley and Walters 1982 plate XII). From instructions issued by General Pelet in 1838 it appears that name books were in use at that time also in France. Since 1905 name-sheets have been used for the French 1/50.000 series (called "calque de noms" or "calque des écritures") but they had probably been in use as well for the 1:80.000 series in the previous century.

In the Netherlands the production of the 1:115.200 map series in the Napoleonic age was accompanied by questionnaires sent out to local government authorities, asking for the proper orthography of the names of the hamlets and other inhabited places within each parish, a procedure that was repeated in the late 1850's for the production of the Dutch 1:50.000 map series (Rentenaar 1970). The instructions of the topographers, published in 1807, are accompanied also by exhortations urging them to make sure to collect the right names, and by descriptions of the kind of names to be collected (Krayenhoff, 1808). Cassini's topographers in France collected names of populated places, farms, mill-houses, castles, chapels, judicial districts ("justices"), ruins and important roads. In later years the number of name categories increased as hydronyms and oronyms, names of isolated features such as road-junctions, wells and field-names (lieux-dits) were added to the French topographic maps. But, there appeared to be an hierarchy amongst these new categories: field names were only included in the maps when the density

(no. of names per square decimeter) of other names became too low.

Amongst the authorities to be consulted as indicated in the topographic instructions and regulations, apart from local gentry or clergy, were the local municipalities who made their entry: here also an hierarchy seemed to exist as the name-sheets might be passed on to the departmental officials (Regional keepers of records and articles) (IGN 1968) before the lists were passed on to the survey headquarters.

One of the sources to be used for gathering names, at least on the continent, were the cadastral plans. These contained large numbers of field names. However, little care was taken in collecting these field names for the cadastral plans, as the large numbers of complaints by early toponymists prove: for the Netherlands (Ormeling 1983 p.29), Belgium (De Flou 1929) and France (Berthaut 1898).

As the topographic maps became more established, the orthography of the names they contained came to be regarded as normative. British policy used to be expressed by: "When names have assumed a corrupted form which is thoroughly established, their orthography should not be altered, even whey they are known to be etymologically wrong" (Regulation no.15 issued to topographers 1874 - cf. Johnston, 1905).

The Royal Netherlands Academy of Sciences published a gazetteer in 1864 which spelt the name of the towns of Gorkum, Deutekom and Workum, as Gorinchem, Doetinchem and Woudrichem, which were archaic forms used neither in these towns nor elsewhere. The influence of these mapped name versions was so strong, however (due to the fact that map names are directly projected on to the image that man has of his environment) that nowadays only the

archaic forms are in use everywhere, with the exception of the immediate rural surroundings of these towns.

The influence of printed information increases as the distance between oneself and a named entity becomes greater, and the possibility of finding out its name by oral communication decreases. Primary education has the same effect. Swiss examples mention the fact that the names recorded by surveyors and incorporated on the maps, are taught in school by teachers, mostly from foreign parts, who put their trust in these written sources rather than in local oral traditions (Grosjean 1974/5 p.44).

French Flanders, and the Dutch province of Friesland are both examples of areas that have majority language names considered alien by the local population. These names are considered French or Dutch. As a matter of fact these names often are codifications of early medieval versions of local names. As the minority languages developed further, especially in their colloquial forms, new forms developed which led to discrepancies between these new, "national" forms and the old, "alien" forms. Codification therefore has led here to alienation.

As it can influence toponymical attitudes, it is important to establish that cartographic codification is also a random process. Rentenaar showed (1984) how a number of historical developments or relationships in distant parts of the world were recorded in the Dutch countryside as geographical names (eponymized place-names): the colonization of the Netherlands East Indies, the Napoleonic wars, the Korean War, as well as trade relations with other European countries -all left their traces in Dutch rural toponyms. Most of these reflections tend to be short-lived however. According to Rentenaar, the number of toponyms reflecting the 1950-53 Korean War had already been more than halved in 1973, as compared with the 1954 survey by questionnaire.

If a survey for the topographic base map would take place soon after the christening event or the determination of these toponyms occurred, the chance of their incorporation in the map would be greater than if more time elapsed. With a ten year revision cycle, the chance to collect these eponymized place names for the topographic map of the Netherlands 1:25,000 would depend to a large degree on the relation between this cycle and the moment of christening. For smaller features, cartographic codification could be regarded as a random process.

3. Generalisation

The base map, some of whose toponymical characteristics have been referred to in the previous paragraphs, is used as a starting point for smaller-scale derived maps. In the generalisation process, the composition of the map names will change, as not all name categories from large scale maps (names of municipalities, townships, other administrative names, field names, road names, names of other populated places, names of isolated detached buildings, farm names) will be represented on small-scale maps. The required representation of named elements excludes many name categories (See Figure 1).

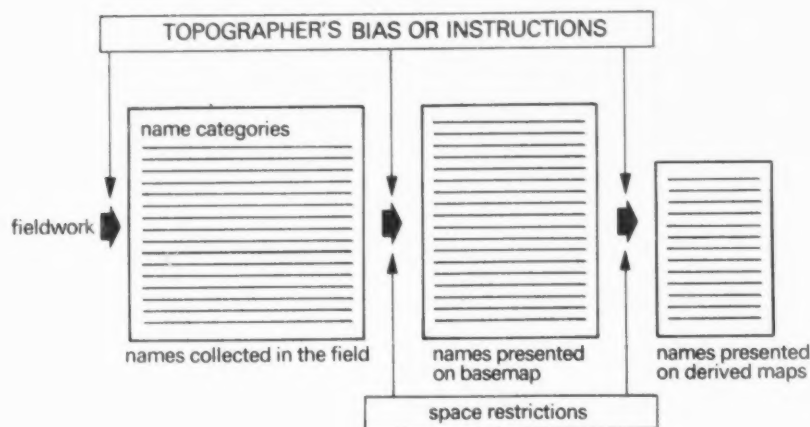


Figure 1 - General toponymic effect of map generalisation

The first printed maps that were published in Western Europe from the 1470's onwards - apart from those contained in Ptolemy reprints - were national maps. In the 16th century regional maps were added, on medium scales, and the 17th century saw the first printed large scale map, of some wealthy regions like Holland or Lombardy. Regular topographic maps in our modern sense appeared from the 18th century onwards, on scales approaching 1:25,000 in the 19th and 1:10,000 in the 20th century (see figure 2).

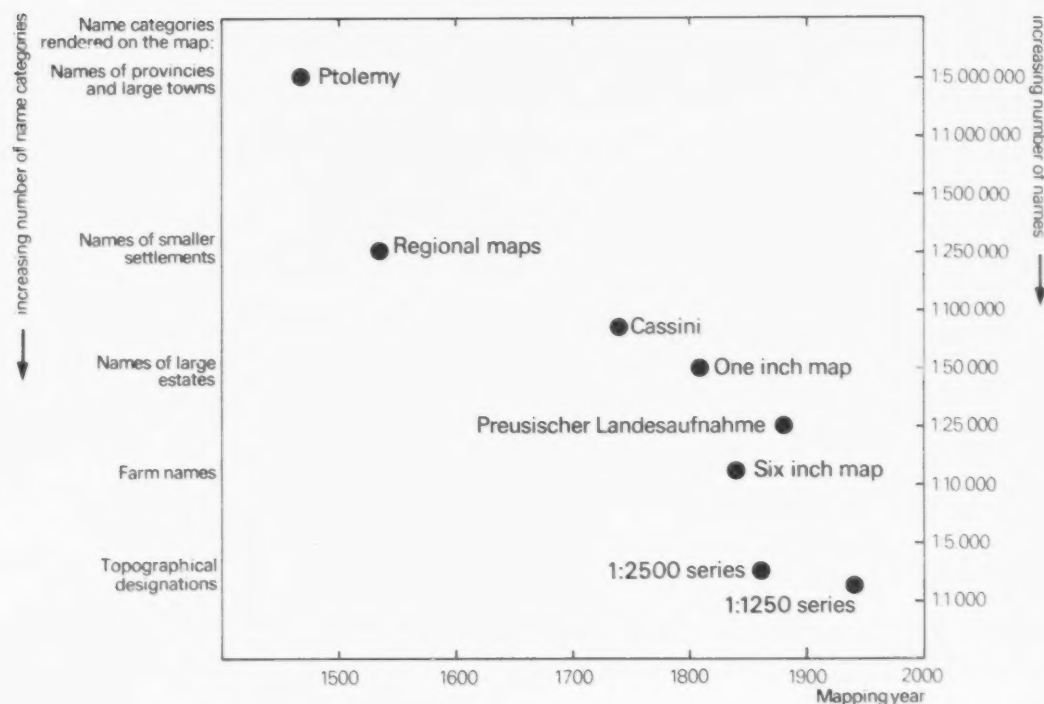


Figure 2 - The relation between map-year and map-scale (and number of toponyms) on printed maps in Western Europe

In the 16th & 17th century maps, minority languages still had a role, like Catalan, but in later surveys nationalistic influences regarding toponyms are stronger. The proportion of minority names transformed into the majority language increased. This trend is reinforced by an increased use of generic terms, all of which are rendered in the majority language. The space available for toponyms on maps increased with their scale. The number of names that are codified is continually increasing therefore, and the names implemented on the maps stem from a growing number of name categories.

Through the centuries cartographers have had a continuously changing and expanding interest in the various categories of toponyms. On Cassini's maps - as well as on their smaller scale predecessors - one finds only the names of large settlements, rivers and isolated estates. Regional and coastal names, as well as names of mountain ranges are hardly represented, even though there is sufficient space on the map. These last categories first appeared on the map with the introduction of the cadastral surveys (regional names and field names), with the publication of reliable sea-charts and the awakening of man's interest in his natural environment during the second half of the 19th century. It was only then that, for example, other features, such as relief features were named on maps.

The names of small features have only been introduced on maps in recent years. Their presence has been effected by the publication of maps at larger scales, because of the changed interest of the map-user and the topographer, and the availability of new sources. In the generalisation process only the most important objects of a base map-sheet are transferred to a smaller scale. If one realizes that the names of the largest object in a minority language region are first to be considered for transformation in the minority language, than it is quite evident that there will be

relatively more names transferred to the majority language on small-scale maps and derived maps than on maps of a larger scale. This phenomenon can be named the scale-effect. In Brittany, for example, there are various places which are called "Kemper", a toponym which indicates the confluence of two rivers. The largest of these places is known in French as Quimper; smaller versions are represented on the map by the word Kemper. Only the largest, Quimper, is to be found on medium - and small scale maps (see figure 3).

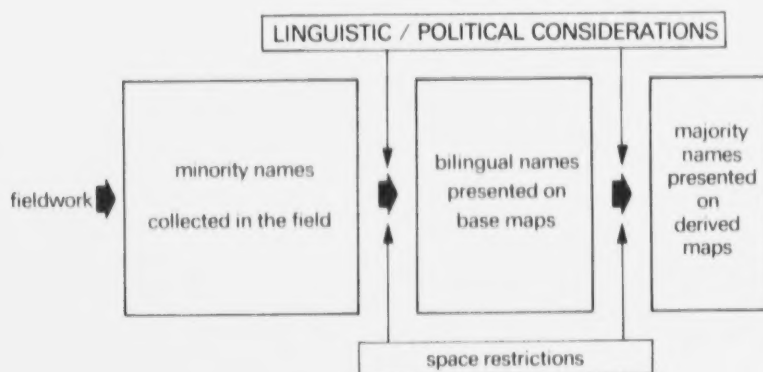


Figure 3 - Model of the 'scale-effect' phenomenon

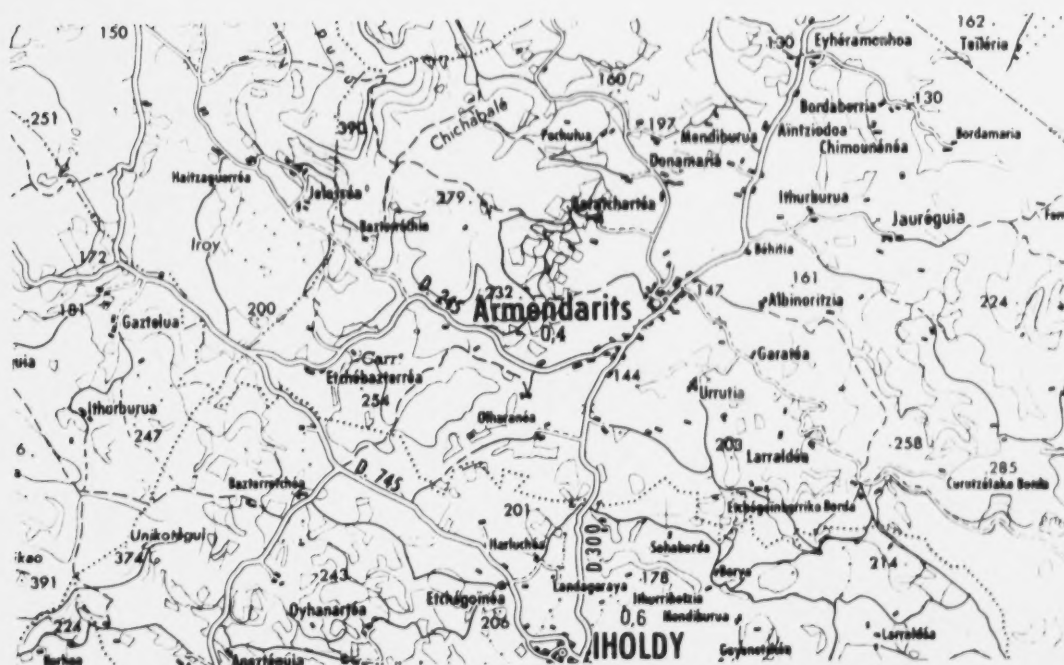


Figure 4 - Detail of the French 1:50,000 map, from the Basque Provinces. Carte de France 1:50,000 sheet XII-47, Iholdy, 1967

When the scale of the map decreases, the image evoked by the names changes. Because of the generalisation and the inevitable selection of the large features to be retained, the image of e.g. a Basque-speaking region (see figure 4) changes into that of a French one (see figure 5).



Figure 5 - The Basque Provinces at the scale 1:5 million. Reproduced from Deutsche Weltkarte, sheet 2. Europa-Süd, Kart. Inst. Mayer/Bibl. Institut, Mannheim 1966

At the scale of 1:50,000 the map seems only to hold Basque names; at the scale 1:2 million the percentage of French names is already some 60%, at the scale of 1:5 million most maps only reproduce the names Biarritz, Bayonne, St. Jean de Luz, Cambo les Bains and Mauléon-Licharre Aud Arnegui. Of these, only the name Hendaye has Basque origins. This results in a proportion of Basque names of 20%.

4. Name category specialisation

It is, of course, geographical and historical circumstances, that determine the number of relative proportion of names in each name category, that can be ascertained in the field. Once collected, the number or relative proportion of names in each name-category that will appear on maps (i.e. both base maps and derived maps), will be influenced or determined by linguistic

political factors, and by functional and cartographical considerations.

It is especially this mechanism by which toponyms are collected for maps, that might be insufficiently understood by toponymists to whom maps are an important source.

In the production of derived maps cartographers are influenced by spatial restrictions. A map on the scale 1:50,000 has one fourth of the surface of the same area on a map 1:25,000. This scale reduction implies a reduction of cartographic information, and therefore also of names. According to Töpfer "square root law" (1974) a scale reduction of the scale by half will result in $0.7 \times$ the original number of names on the derived map. This name reduction could affect all name categories to the same degree, but could also affect some name categories more than others.

One type of influence could be the substitution of minority names by majority names. Another type is the selection of name categories for derived maps in view of their functions (see figure 6).

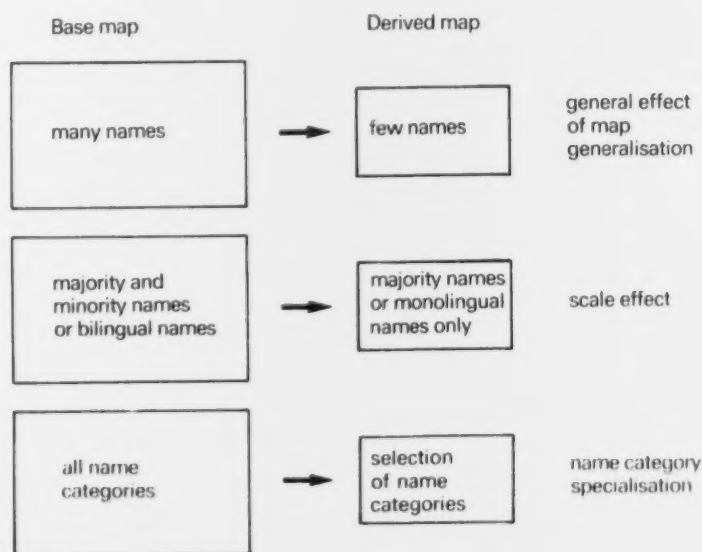


Figure 6 - All 3 types of toponymical distortion on derived maps

As was indicated above, the name categories which the topographer has to record change during the course of time. In the 16th century only names of towns, villages and estates were recorded. It was only from the 19th century onwards that relief features were named on maps.

Moreover, many micro-toponyms are only considered for mapping when landed property is registered for cadastral purposes. The gradual increase of the scale of topographic maps since the middle of the 19th century resulted in a first recording of names of farms, regions and smaller watercourses.

The nature of the names that are collected not only depends on the period in which they were recorded, but also on the century in question or the agency involved. When comparing the German and French topographic maps of the Alsace at scale 1:25,000 from the years 1900 and 1915 respectively, the German maps show many regional names and the French maps show more names of fortresses.

The categories of names recorded also vary within the same country. French cadastral plans for instance, mention names of cadastral lots and regional names. The topographic service in France records primarily the names of point features (populated places, individual or isolated buildings, oronyms, road junctions, wells). Area names such as field names ("lieux-dits") are only added when only a low density of the other name types can be procured. The mapping service of the Ministry of the Interior recorded mainly administrative data and roads on its map series 1:100,000 (Carte de l'Intérieur 1879-1922). The present "Carte Michelin", with its navigational function emphasises other aspects, like points of interest, relief features, forests and lakes.

Now that in some countries minority names are being restored in their original form, this procedure is operated along the lines of name categories as well. On topographical maps 1:25,000 and 1:50,000 of Frisian-speaking areas in the Netherlands, farm names, road names and names of small water courses may be rendered in Frisian only when the names collected in the field are Frisian only (Topografische Dienst, 1979).

Names of small settlements (hamlets) that have place name signs in Frisian only, are rendered bilingually on the map: all other name categories are still to be rendered in Dutch only on the map. On German maps 1:25,000 river names in the Sorbian-populated Lausitz (Lausatia) area were Germanized only after 1933; place names had been Germanized before the First World War (Ormeling 1983, p.142). The same phenomenon is to be seen in the Austrian province of Carinthia, where the frontline of German(ized) settlement names moves eastwards gradually, to be followed at a great distance in time, by a sudden Germanization of mountain names after the First World War. The combined effect of scale and geography on name categories bear also on the relation between minority and majority names. In French Flanders the proportion of unchanged original Dutch names on French maps at various scales has been ascertained by comparing them to 17th century maps by Blaeu (1663), when the region was not yet conquered by France, as is shown in table 1.

Table 1

Proportion of unchanged Dutch names in French Flanders according to recent French topographic maps, and the Carte Michelin

Scale	1:25,000	1:50,000	1:150,000	1:200,000 Carte Mich.	1:250,000	1:1000,000
Unchanged Dutch	35	30	28	39	41	41
French names	65	70	72	61	59	59

Note: only names already recorded by Blaeu were considered

The smaller the scale, the higher the proportion of Dutch names. This does not comply with the general rule ("scale effect") that smaller scales, which can only contain larger features (which are frenchified sooner) present more majority names. A possible reason for this deflection is the purpose of the smaller scale maps: their function will be that of road maps, and this map type shows relatively more names of populated places - a category that has been least frenchified here. On the Carte de France 1:50,000 (sheet XXIII-3, Cassel, 1941) of 411 toponyms in French Flanderns 30% are still Dutch. On the map 1:1 million, the "Carte du Monde au Millionième", Sheet Paris (dated 1930) of the 17 names in French Flanders 7 are Dutch.

New French names that have been added since Blaeu, comprise mainly names of bridges and watercourses.

In the Alsace, the smaller the scale of French topographic maps, the more the proportion of German toponyms increases, to finally diminish again. The reason here, as in French Flanders, is that the proportion of names of populated places increases on maps on smaller scale, and it is precisely in this category of names that the effects of a frenchification process are least pronounced. However, frenchification occurred in the case of the larger Alsatian towns which will be retained longest on maps of diminishing scales. On atlas maps at the scale of 1:5 million, place names such as Strasbourg, Mullhouse are kept, and perhaps Haguenau or Saverne (instead of their previous German spellings: Strassburg, Mullhausen, Hagenau, Zabern). These proportions have been illustrated in figure 7.

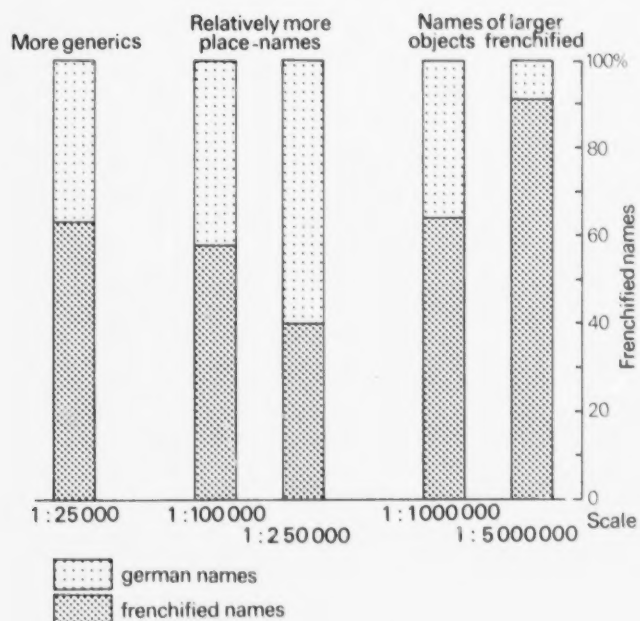


Figure 7 - Scale dependance of the percentage of frenchified names on the French topographic maps of the Alsace region.

On large scale maps (1:25,000) the proportion of field names is high, and it is this name category that has been frenchified by adding French articles and generics. Of the names of populated places, a smaller proportion has been frenchified. The smaller the scale, the larger the proportion of names in this category, and consequently that of German names. This continues up to a certain point, i.e. until the scale becomes too small to represent all but the most important towns. Almost all larger towns have a frenchified name, and on strongly generalised maps only these larger settlements will be retained.

The influence of geographical factors on name category specialisation can be seen in figure 8. When comparing the treatment of toponyms in six minority language regions in France (Roussillon, Alsace, Corsica, French Flanders, Brittany and the Basque Provinces) it depends on the geographical characteristics of the region concerned, to which scale the percentage

of minority toponyms is higher. In the case of the Alsace with its many towns and large villages, this occurred at the scale of 1:250,000 (see figure 7). In Brittany, with its many hamlets, this occurred rather at the scale 1:100,000, and in the Basque provinces with their dispersed farmsteads the proportion of minority names is highest at the scale 1:50,000. Differences continue to be present at smaller scales, as can be seen in figure 8. It may seem trivial to work with percentages here, as the number of toponyms in the minority areas on small-scale maps is small. The same image seems to repeat itself again and again, however, i.e. a relatively small number of minority names on the small scales and a relatively large number on the large scales. This tendency becomes more evident by transforming the available figures into percentages.

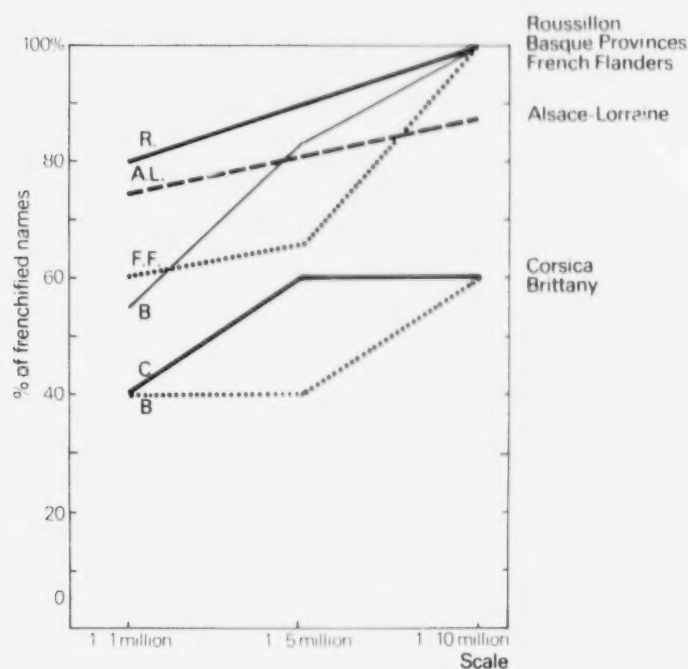


Figure 8 - The influence of the map-scale on the percentage of frenchified toponyms. A tentative comparison between the various linguistic minority areas in France

Among the effect of cartographical factors mention should also be made of the effect of the addition of generic terms, and designations (or appellatives). Some topographic services tend to use map symbols in order to render a specific group of phenomena; others rather use designations, mostly in abbreviated form.

The map sheet Caernarfon & Bangor (OS 1:50,000 second series, sheet 115, 1974) contained 93 Welsh names with English generic terms added (as-farm), 422 separate English designations (churchyard, cemetery) and 340 English designations in abbreviated form, such as PH for Public House, Sch for School etc. All together they formed, next to the 1320 Welsh names 1/3 of the total number of written units on this map.

On the Belgian topographic map 1:25,000 of the German-speaking Eupen-St. Vith region, 1280 toponyms can be found, of which 84% are in German. Next to those, there are also some 1850 French generic terms and designations. These change the proportion of German words on the map from 84% back to some 35%. This large number of abbreviations is the result of a cartographic policy which prefers letter-symbols or abbreviations to figurative or geometrical symbols, as used in other countries.

5. Examples

During the period between 1935 and 1955 a linguistic controversy raged in Central Europe which related to i.a. the use of maps as sources of linguistic information. The controversy concerned the studies of Battisti (1953) who tried to prove that the Ladins, as the original inhabitants of South Tirol in present-day Italy, had only become Germanized in the 17th century. This would imply that the incorporation of South Tirol into Italy in 1919 was not the occupation of foreign soil for military reasons but the return of a recently aliented member of the family into its father's home. Battisti attempted to defend his claims by proving that

the majority of toponyms in South Tirol were either Italian or of Latin derivation. Battisti helped himself along by proclaiming all pre-German names to be neo-Latin (Italian) names, and also by incorporating all German names comprising loan words adopted from Latin into the Italian camp, as was the case e.g. with hagionyms or ecclesiastical names. Moreover he strengthened his position by improving the ratio between Italian to German names by using map material at scales which do not allow a homogenous representation of names (cf. Finsterwalder 1953). On the maps used by Battisti, at a scale of 1:100,000, relatively large numbers of names of cadastral lots are incorporated from less densely populated regions. In the more densely populated regions, only names of large settlements are mentioned. The names of these settlements in South Tirol originated from pre-Roman times. The names of the cadastral lots in the mountains are German. For Battisti, this was cause to assume that when the German-speaking population began penetrating this region from about 500 AD, only the mountain areas were settled by them. When examining large-scale maps however, most of the names of cadastral lots in the valleys are also rendered in German. Conclusions on the settlement history of an area require maps on scales which allow complete representation of all categories of toponyms!

Finally, he used maps that gave a distorted representation of names. The names were counted on a recent Italian map, which no longer rendered the names in the traditional versions but in an Italianized forms. Where the *österreichische Spezialkarte 1:75,000 (1913)* contained the name "Gasthaus Schöne Aussicht", the Italian map rendered it as "Albergo Bella Vista", and Battisti classified the name as Italian. Depending on the guidelines used by the topographers, it is conceivable that relatively more Italian-sounding toponyms were selected by Italian topographers for rendering on the Italian maps. This example from South Tirol is particularly instructive because it shows the traps toponymists might fall into, either willingly or accidentally.

Conclusion

The names on a map form a selection which is dependant on the space available on the actual sheet of paper. This selection may give rise to a certain distortion under the influence of service regulations and procedures, preferences or derived map functions.

This does not necessarily disavow the use of maps in order to investigate place names. It stresses, however, the importance of selecting the proper map, and of getting to know the service regulations that governed or determined the actual incorporation of names on the base map and the selection process for names intended for derived maps. It is only then that the use of maps as sources for toponymical studies will provide worthwhile results.

References

- C. Battisti (1953), Italiani e tedeschi nell'Alto Adige., L'Universo 53, nov-dic.
- Berthaut (1898), La Carte de France 1750-1898. Etude historique. Paris: Service Géographique.
- J. Blaeu (1663), Le Grand Atlas. Vol. 4. Amsterdam: Blaeu.
- K. De Flou (1929) Over bronnen voor toponymie. In: Inleiding tot de studie van de Vlaamse plaatsnamen, pp.36-69.
- K. Finsterwalder (1953), Ortsnamen und Sprachengeschichte in Südtirol. Erdkunde 8, pp.253-63.
- G. Grosjean (1974/75), Kartographie für Geographen. Bern: Geographisches Institut (Geographica Bernensia U9, 10).
- Harley, J.B. and G. Walters (1982), Welsh orthography and Ordnance Survey mapping, 1820-1905. Archeologica Cambrensis 131, pp.98-135.
- IGN (1968), La toponymie officielle des cartes de France et le traitement mécanographique des écritures cartographiques. Bulletin d'Information de l'Institut Géographique National 6, pp.11-13.
- Inleiding tot de studie van de Vlaamse plaatsnamen (1929), Den Haag: Nijhoff (Nomina Geographica Flandrica, Studien 2, 1).
- D.A. Johnston (1905), Instructions to field examiners. Southampton: Ordnance Survey. First edition about 1874.
- C.R.I. Krayenhoff (1808), Instructie voor de geographische ingenieurs bij het Depôt-Generaal van het Koninkrijk Holland. Depôt-Generaal van Oorlog (Algemeen Rijksarchief - Archief Gogel 196).
- F.J. Ormeling (1983), Minority toponyms on maps. The rendering of linguistic minority toponyms on topographic maps of Western Europe. Utrecht: Geografisch Instituut, Utrechtse Geografische Studies 30.
- R. Rentenaar (1970), Het leger, de Akademie en de plaatsnamen. Kleine bijdrage tot de spellingsgeschiedenis van de aardrijkskundige namen in Nederland, 1857-1864. Naamkunde 2, pp.50-76.
- R. Rentenaar (1984), Vernoemingsnamen (Eponymized Place-names. A survey of the role played by eponymization in the toponymy of the Netherlands). Amsterdam: P.J. Meertens Instituut.
- F. Töpfer (1974), Kartographische Generalisierung. Gotha/Leipzig: VEB Hermann Haack, Ergänzungsheft Nr. 276 Petermanns Geographische Mitteilungen.
- Topografische Dienst (1979), Friese toponiemen. Internal regulation of the Netherlands Topographic Survey, 24.4.1979, Delft.